

Amendment to the Abstract:

Please replace the existing abstract with the following abstract:

An apparatus for measuring hydrodynamic parameters, especially for Augmentation Index (Aix) and /or Ejection Duration (ED), by non-invasive, cuff based occlusive, blood pressure measurement, which apparatus comprises occlusive, oscillometric automatic blood pressure meter and units. There can also be a method for non-invasive measurement of hemodynamic characteristics, especially AN and/or ED with an occlusive, pressure sensor cuff, placed on the brachial artery, wherein the apparatus according to the invention samples and analyzes and evaluates the signal flow of the oscillations of pulse waves using an unusual stepwise blood pressure measurement.